

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF THE CLAIMS:

Claims 1-10 (Cancelled)

11. (Original) A semiconductor integrated circuit device comprising:

a correlation double sampling circuit for sampling an analog color video signal output from an imaging element;

an amplifying circuit for amplifying the analog color video signal output from the correlation double sampling circuit;

an AD conversion circuit for converting the analog color video signal amplified by the amplifying circuit to a digital signal;

a differential circuit for obtaining a difference between the codes of pixels of the digital signal in regard to codes for the same color in pixels that adjoin one another, and

a code conversion circuit for code conversion of an output of said differential circuit.

12. (Original) A semiconductor integrated circuit device according to claim 11,

wherein the sampling period of the correlation double sampling circuit corresponds to a color arrangement of the analog color video signal output from the image element.

13. (Original) A semiconductor integrated circuit device according to claim 12,

wherein said differential circuit comprises a circuit to set an amount of time corresponding to the sampling period.

14. (Original) A semiconductor integrated circuit device according to claim 13,

wherein the circuit comprises a register for setting the amount of time.

15. (Original) A semiconductor integrated circuit device according to claim 12,

wherein the amount of time corresponds to a color filter used with the image element.

16. (Original) A semiconductor integrated circuit device according to claim 11,

wherein the code conversion circuit is a binary to gray code conversion circuit for converting an input binary code to a gray code.

17. (Original) A semiconductor integrated circuit device according to claim 11,

wherein the code conversion circuit comprises a circuit for adding or subtracting a fixed value to or from an input code.

18. (Original) A semiconductor integrated circuit device according to claims 11,

wherein the differential circuit comprises a delay circuit for delaying an output code of the AD conversion circuit and a subtraction circuit for obtaining a difference between the output code delayed by the delay circuit and an input code, and

wherein the delay circuit is constructed to vary a delay time depending on a color arrangement of an input video signal.

19. (Original) A semiconductor integrated circuit device comprising:

a correlation double sampling circuit for sampling an analog color video signal output from an imaging element;

an AD conversion circuit for converting the analog color video signal output from the correlation double sampling circuit to a digital signal;

a differential circuit for obtaining a difference between codes of pixels of the digital signal in regard to codes for the same color in pixels that adjoin one another, and

a code conversion circuit for code conversion of an output of said differential circuit.

20. (Original) A semiconductor integrated circuit device according to claim 19,

wherein the sampling period of the correlation double sampling circuit corresponds to a color arrangement of the analog color video signal output from the image element.

21. (Original) A semiconductor integrated circuit device according to claim 20,

wherein said differential circuit comprises a circuit to set an amount of time corresponding to the sampling period.

22. (Original) A semiconductor integrated circuit device according to claim 21,

wherein the circuit comprises a register for setting the amount of time.

23. (Original) A semiconductor integrated circuit device according to claim 21,

wherein the amount of time corresponds to a color filter used with the image element.